FIG. 1

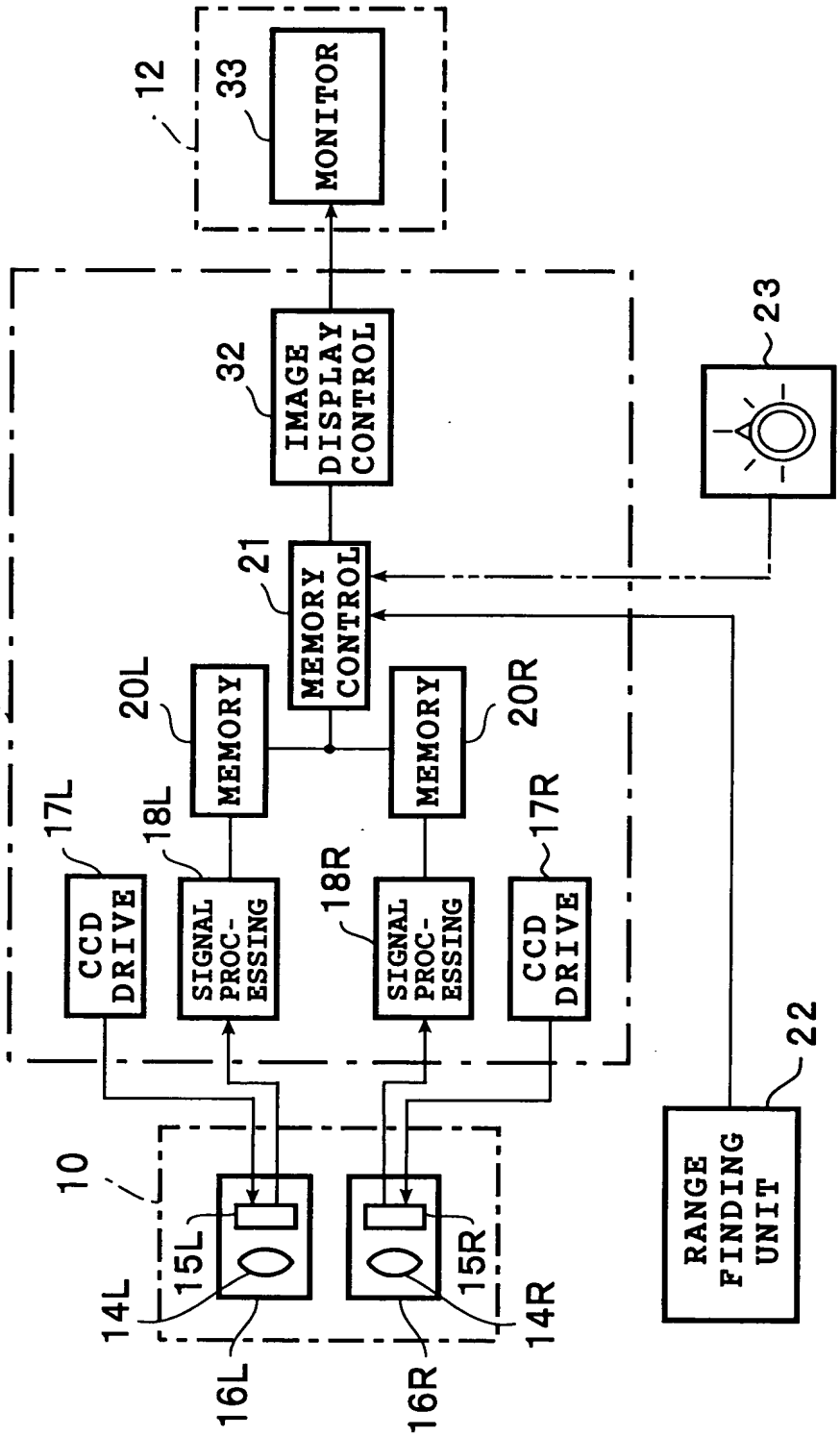

12
33
MONITOR
IMAGE DISPLAY CONTROL
32
23
11
21
MEMORY CONTROL
20L
MEMORY
MEMORY
20R
17L
18L
18R
17R
CCD DRIVE
SIGNAL PROC-ESSING
SIGNAL PROC-ESSING
CCD DRIVE
10
15L
15R
14L
14R
16L
16R
RANGE FINDING UNIT
22

FIG. 2

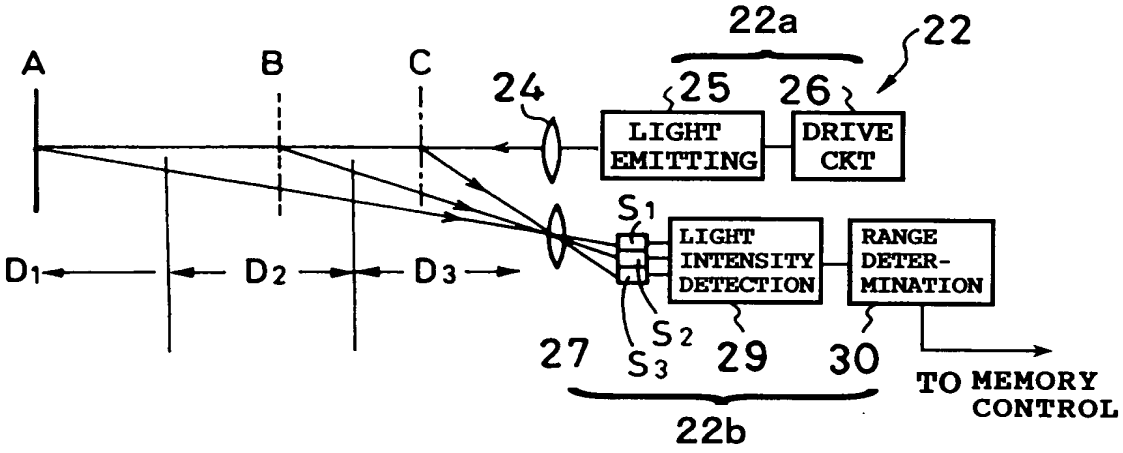

22a
22
A
B
C
24
25
26
LIGHT EMITTING
DRIVE CKT
S1
LIGHT INTENSITY DETECTION
RANGE DETER-MINATION
D1
D2
D3
27
S3
S2
29
30
TO MEMORY CONTROL
22b

FIG. 3

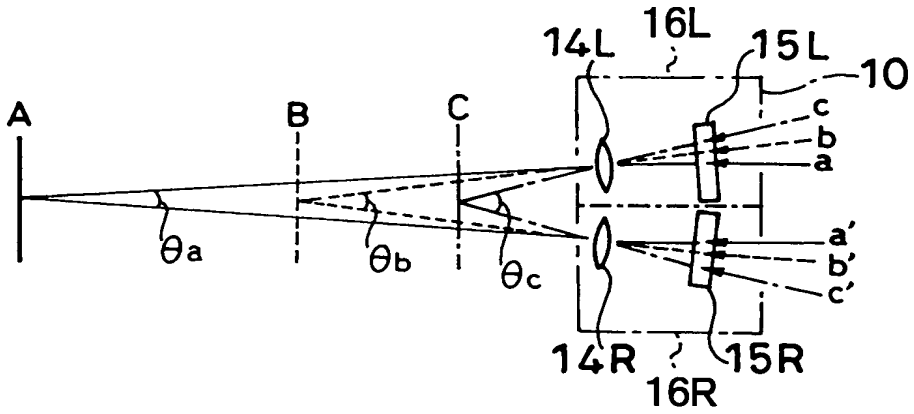

14L
16L
15L
10
A
B
C
c
b
a
a'
b'
c'
θa
θb
θc
14R
16R
15R

FIG. 4

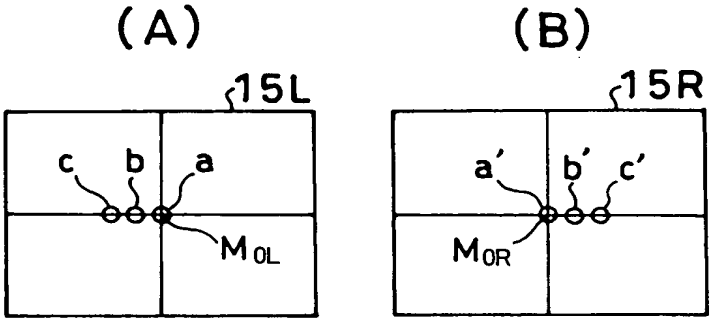

(A)
(B)
15L
15R
c
b
a
a'
b'
c'
M0L
M0R

FIG. 5

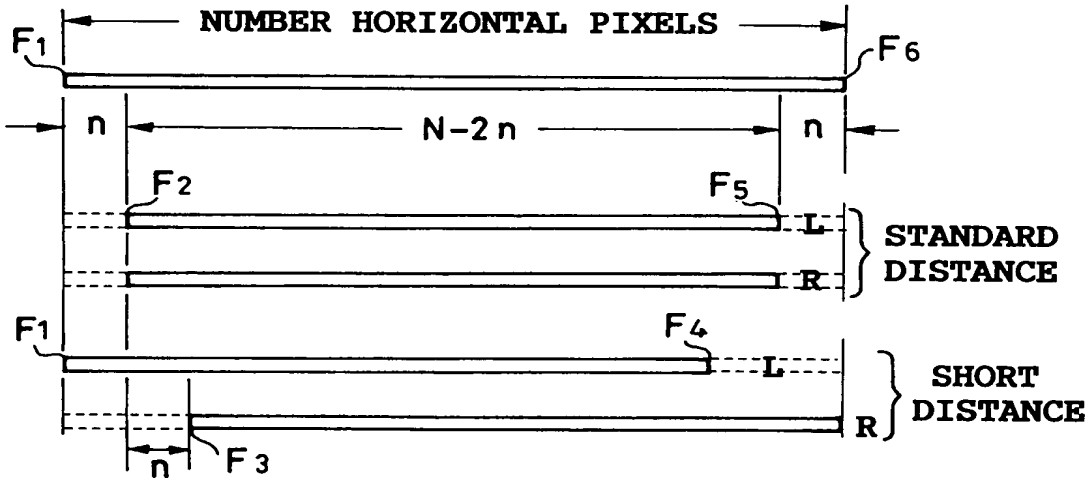

NUMBER HORIZONTAL PIXELS
F1
F6
n
N-2n
n
F2
F5
L
R
STANDARD DISTANCE
F1
F4
L
R
SHORT DISTANCE
n
F3

FIG. 6

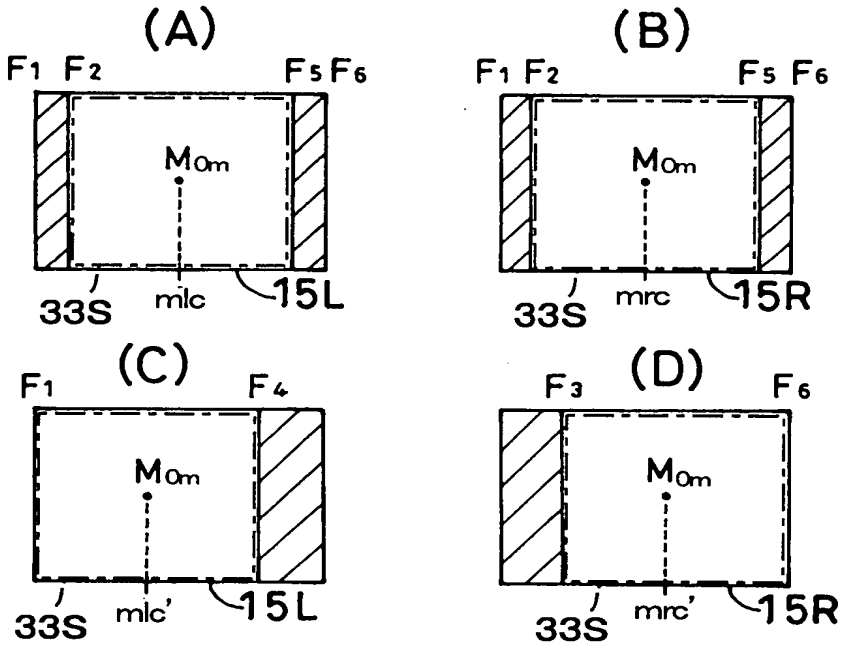
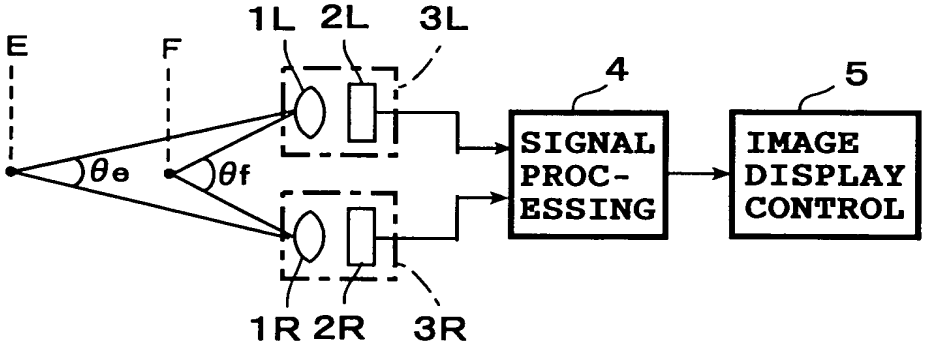

(A)
F1 F2
F5 F6
Mom
33S
mlc
15L
(B)
F1 F2
F5 F6
Mom
33S
mrc
15R
(C)
F1
F4
Mom
33S
mlc'
15L
(D)
F3
F6
Mom
33S
mrc'
15R

FIG. 7


E
F
1L
2L
3L
θe
θf
4
SIGNAL PROC-ESSING
5
IMAGE DISPLAY CONTROL
1R
2R
3R